IN THE SPECIFICATION

Please amend the specification as follows:

Page 22, paragraph [0074], lines 14-23, please delete this paragraph and substitute the following:

[0074] Various fuzzy membership sets 502-514 may be utilized and weighted to refine the location. Different types of fuzzy membership sets 502-514 may be utilized in the weighting calculation. For example, fuzzy membership sets 502-514 may be utilized for proximity to various categories of user profile locations (e.g., the closest user profile favorites 502, user profile history 504, etc.). Additionally, fuzzy membership sets 502-514 may describe the current activity (e.g., business visitor profile, commuter profile, leisure visitor profile, etc.), and by extension, weighted proximities to different kinds of landmarks (e.g., the closest lodging landmark 506, the closest visitor landmark 508, the closest business landmark 510, the closest street intersection 512, the closest commuter landmark 514, etc.).

Page 27, paragraph [0090], lines 8-17, please delete this paragraph and substitute the following:

[0090] Additionally, to experiment on the output 612 produced based on varying rules and input 602, the inclusion and exclusion of rules may be influenced for experimentation. For such experimentation, embodiments provide that the rules use logical products and that only non-zero logical products contribute to the final inference. For example, if the ~~member-ship~~ membership function 604 produces P, N, and Z values that are zero, the inputs 602 have no magnitude and cannot participate in the rules. Further, since logical operations are performed, if a zero value were used, the product result in a rule would also be zero (thereby producing an improper output 612). Accordingly, initializing a value of 0.0 for the P, N, and Z values of a function 604, excludes the rule from contributing in as a result of the logical product rule (since 0.0 and X = 0.0).

Page 30, paragraph [0096], lines 6-8, please delete this paragraph and substitute the following:

[0096] In a simple example, the user may not be very close to any favorite locations but is very close to a location in the user's profile history. In such an example, the input membership table has the values ~~is~~ as illustrated ~~as~~ in Table 3.

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Pages 34 and 35, paragraph [0106], lines 16-23 and 1-2, please delete this paragraph and substitute the following:

[0106]   FIG. 7 is a flow chart illustrating the use of fuzzy logic reasoning to refine a device 204 location in accordance with one or more embodiments of the invention. At step 700, the approximate location of a device is determined. At step 702, a rule base 606 that comprises an ordered collection of rules is read into memory or loaded from a database (e.g., database 232). The rule base 606 may be progressively refined based on empirical data collected over time. Further, the rule base 606 may specify a default rule to use if the reasoning fails to produce a result. Additionally, the rule base 606 may be adaptable such that is it may be configured to reflect regional trends, social trends, or demographic trends. Such adaptability may be user controlled wherein the user is permitted to add, delete, and edit the rule base to customize/personalize the reasoning.

Page 36, paragraph [0112], lines 17-23, please delete this paragraph and substitute the following:

[0112]   This concludes the description of the preferred embodiment of the invention. The following describes some alternative embodiments for accomplishing the present invention. For example, any type of computer, such as a mainframe, minicomputer, or personal computer, or computer configuration, such as a timesharing mainframe, local area network, or standalone personal computer, or an any type of mobile device such as a cellular phone, laptop computer, personal digital assistant, etc. could be used with the present invention.

Page 46, lines 1-10, please delete this paragraph and substitute the following:

One or more embodiments of the invention provide a method, apparatus, and article of manufacture for refining an approximate location of a mobile device using fuzzy logic reasoning. An approximate location of a device is determined. A rule based base that comprises an ordered collection of rules is then read read into memory, or loaded from a database. A set of imprecise inputs are captured for processing in the rules. However, prior to processing the inputs in the rules, the inputs are processed to determine a magnitude of participation of the input in the rules. The rules are then applied to the imprecise inputs based on the magnitude of participation to produce a logical product. A refined location is then computed based on the logical product.

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